NATIONAL LIBRARY OF MEDICINE
NEWS

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NLM Awards $1,222,679 In Construction Program Funds

Two construction grants totalling $1,222,679, awarded under authority of the Medical Library Assistance Act, were announced in January by Martin M. Cummings, M.D., Director of the National Library of Medicine.

A $1,121,450 grant was awarded to the Medical School at the University of Utah, Salt Lake City, for construction of a three-story medical library covering 35,000 net square feet. The facility will accommodate a collection of some 190,000 items and seat 388 readers.

The Auburn University School of Veterinary Medicine received a $101,229 grant for construction of a one-story library to be located in a wing of the new Basic Science Building now under construction. The Library will house a collection of 17,000 volumes and seat 112 readers.

The Medical Library Assistance Act authorizes a program of construction grants to assist public and private non-profit institutions in the construction of new or expanded health-science library facilities, and in the renovation or remodeling of existing facilities. Federal participation may be up to 75% of the project costs exclusive of land acquisition and legal fees.

The Act also authorizes programs of assistance to help health-science libraries for resources, training, research, publications, and the development of Regional Medical Libraries. Awards are also available to individuals for postdoctoral fellowships and special scientific projects.

Hadassah Honors Dr. Lieberman

Dr. James Lieberman, Associate Director for Audiovisual-Telecommunications and Director, National Medical Audiovisual Center, NLM, was honored January 28, by the Atlanta Chapter of Hadassah as recipient of their Myrtle Wreath Award, presented annually to outstanding community leaders. Dr. Lieberman received the Laurel of Healing Certificate for "his leadership in the field of education and communication, particularly for his pioneering work in advancing progress in medicine and the allied health sciences."

In addition, the names of persons receiving this award are permanently engraved in the Wall of Healing at the Hadassah-Hebrew University Hospital in Jerusalem.

Other Myrtle Wreath recipients were Dr. Benjamin Mays, President Emeritus, Atlanta University Center's Morehouse College, and Mr. Robert Shaw, Musical Director and Conductor of the Atlanta Symphony Orchestra.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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NLM Participates in Telephone-Radio Conference

In cooperation with the University Extension Program, Department of Postgraduate Medical Education, University of Wisconsin, Madison, Dr. Norman P. Shumway, Chief, Medical Subject Headings Section, Bibliographic Services Division, NLM, gave the first of two lectures from NLM via the University of Wisconsin Medical Center's Telephone-Radio Conference. Dr. Shumway spoke on "Index Medicus and MeSH - Companion Keys to the World's Biomedical Literature."

The lecture, given January 21, was prerecorded at NLM and the tape, accompanied by slides, sent in advance to the University. This was the first time NLM has participated in this program.

The Telephone-Radio Conference is a statewide network which allows delivery of lectures to staff in approximately 70 participating hospitals. Each participating hospital is furnished with a slide projector and accompanying visual material keyed to the lecture. Supportive printed material is furnished as well for each person enrolled.

After the taped lecture was delivered, Dr. Shumway, in Bethesda, participated in the question and answer period via long-distance hook-up. The comments and questions coming in from various locales in Wisconsin were audible to him as were his answers to them.

The program facilitates continuing medical education by giving professionals in the field local access to lectures on a variety of medically-related subjects by experts from all over the country.

A second telephone radio lecture describing NLM's demand search service will be given in March by Dr. Clifford A. Bachrach, Chief of the Bibliographic Services Division.

Dr. Gluckstein Appointed To Committee

Fritz P. Gluckstein, D.V.M., Coordinator for Veterinary Affairs, NLM, has been named by the American Veterinary Medicine Association's Executive Board to be a member of an ad hoc committee on Nomenclature.

The establishment of this committee was recommended by the Council on Research as a result of its deliberations on the relocation of a system of nomenclature of animal diseases and operations and on the computer programming of nomenclature.

Mr. Adams Attends UNISIST Meeting in Paris

The Central Committee of the International Council of Scientific Unions/United National Educational, Scientific, and Cultural Organization (ICSU/UNESCO) Joint Project on the Communication of Scientific Information, (UNISIST) held its third meeting in Paris, January 21-23, 1969. Mr. Scott Adams, Deputy Director, NLM, attended these sessions as an observer for the UNESCO International Advisory Committee on Documentation, Libraries and Archives and in addition, represented the National Library of Medicine at meetings of an Advisory Committee composed of representatives of operating systems on January 20 and January 24, 1969.

Four Working Groups reported on their activities and recommendations. The Working Group on Bibliographic Descriptions, chaired by Dr. Chalmers Sherwin (United States) proposed a six months feasibility study, to be undertaken by the ICSU Abstracting Board, of an international serials data system.

The Working Group on Research Needs in Documentation, chaired by Eng. N. Arutynov (USSR) proposed a list of research needs.

The Working Group on Language Problems, chaired by M. P. Piaganiol (FRANCE) reviewed problems ranging from linguistic barriers to thesauri.

The Working Group on Scientific Information in Developing Countries, chaired by Dr. H. Coblans (United Kingdom) investigated the status of resources available to provide benefits to developing countries from information systems of the more advanced countries.

Meetings of the Working Groups will continue throughout the Spring. The Central Committee hopes to have a preliminary draft of a final report accomplished by December, 1969.

HMD Publication Receives Award

NLM's "A Catalogue of Sixteenth Century Printed Books" was selected to receive an award in the 27th Exhibition of Printing, held in January. A certificate of Achievement was presented in the name of the U.S. Government Printing Office - National Library of Medicine. The 27th Exhibition of Printing was sponsored by the Printing Industries of Metropolitan New York.

NLM Exhibit Receives Special Recognition

The American Society of Anesthesiologists has awarded a certificate of recognition for NLM's exhibit, MEDLARS UNIT AND DEMAND BIBLIOGRAPHY UNIT, which was displayed at the 1968 Annual Meeting held in Washington, D. C., October 19-23. The exhibit was selected for special recognition because of its exceptional educational value and distinguished contribution to the scientific progress in anesthesiology. The units were designed by Mr. Daniel Carangi, Graphics Head, NLM.

Microfilming Activities at NLM

"Preservation of deteriorating material in the Library's collection is a major concern of the Library, and in particular, the Photoduplication section," said Mr. Edward Miller, Deputy Chief, Reference Services Division.

The problem of preserving deteriorating paper has been a concern of scholars and librarians for the last century. Information which should be preserved for many years continues to be lost at an alarming rate. Despite tremendous advances in photographic and electronic technology, the vast bulk of information is still being recorded and stored on paper, as it has been for centuries. Since the third quarter of the 19th century most publications have been printed on paper with an estimated average life of 75 to 100 years; but many items are printed on less costly paper which deteriorates considerably within a decade. Furthermore, the largest percentage of the NLM collection is on paper produced within the last 80 years. Much of this paper has a very short life expectancy.

It is the responsibility of the National Library of Medicine to serve as the archival depository in the United States for the world's biomedical literature and to disseminate this information to the entire biomedical community. Since some items in the NLM collection are the only copies known to exist in the world or to be found in the United States, it is mandatory that they be preserved.

The Photoduplication Section, Reference Services Division, under direction of Mr. Willis Lambert, is responsible for the production of microforms both within the Library and by contract; for the production of all types of photoduplication for the interlibrary loan service; and for archival film for the History of Medicine Division. To maintain superior standards of precision filming and processing operations, the Section utilizes a variety of high resolution microfilm cameras, copy cameras, enlargers, film reproducers, ultrasensitive densitometers, microdensitometers, microscopes, film and image measuring devices, sensitometers, specialized web-fed electrostatic high speed printers, inspector projectors and specially equipped film viewers, focussing equipment and techniques.

The work began in 1937 when Dr. Atherton Seidell furnished a microfilm camera to the Army Medical Library (now the National Library of Medicine) as a function of Bibliofilm Service, operated on behalf of the American Documentation Institute. During World War II, microfilms were used extensively to service medical officers of the Armed Services stationed throughout the world. In 1941, Dr. Seidell initiated *The Current List of Medical Literature*, primarily as a means of keeping readers informed of the availability of microfilms. By 1942, the Library had formed its own photoduplication section.

Captain R. H. Draeger, Marine Corps, U.S. Navy, designed a bookholder to be used with the cameras. This holder provides a slot for the spine of the book and, through a balance mechanism, keeps the pages in a focal plane irrespective of the part of the book being filmed.

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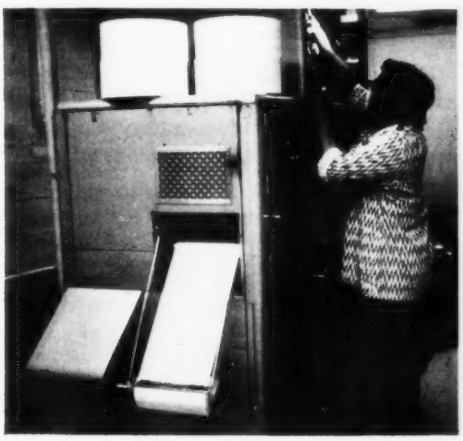
Microfilm (Continued from Page 4)

For reproducing copies of journal articles, the Library has used five mobile microfilm cameras since 1962. These specially designed cameras are completely mobile, traveling down the aisles of the stacks, bringing the camera to the books. With this method, the journals are not taken from the shelf, thus saving the many hours required for sorting and reshelving. The prototype of these cameras was designed and constructed especially for NLM by the Electronic and Technical Services Laboratory of the Public Health Service under the guidance of Mr. Emmet Murphy. The refined version used today was designed by Mr. Anthony A. Berlinsky, Chief, Engineering Development Branch, Bureau of the Census.

In 1964, NLM entered into an agreement with the National Bureau of Standards, establishing a task force to determine practical methods for improving the graphic image quality of photoduplication output for archival and reproduction purposes. The Library adopted a 12 to 1 ratio of reduction, 35mm film, allowing good reproduction of the smaller magazine print as well as that used in books. The copy must be of sufficient quality for reproduction to the third and fourth generation as well as for archival preservation. An additional problem to be considered was the reproduction of characters, especially Japanese, which have fine lines in the characters which can be lost in second and third generation reproduction. The film and techniques now used are so fine that such characters can now be reproduced with the same clarity as other material.



For good reproduction quality, the Library acquired in April 1957, a Xerox Copyflo which produces right-reading copy from the microfilm. The first machine ran paper through at a rate of 20 feet per minute. It has since been modified to produce 40 feet of paper per minute, saving time in production and the money it would have taken to purchase another machine. Sensing marks have also been incorporated through photography in the print, allowing automated cutting between the pages.

Constantly seeking improved methods of microfilming, the Library now looks to the development of a two-lens camera, eliminating the second generation step in reproduction. Special lenses would be required to obtain the necessary quality. NLM is seeking the design of such a camera from private industry.

Highlight From HMD Prints Collection

LE MAGNETISME ANIMAL

Important Discovery by F. A. Mesmer, M.D., Vienna, Austria

The History of Medicine Division of the National Library of Medicine has a collection of pictorial materials of interest to medical historians as well as to members of the biomedical health professions. The Prints and Photographs Collection include all graphic media, ranging in age from 15th century woodcuts to photographs of the latest Nobel prize winners in medicine. From the 16th century on, there was an extensive trade in skillfully engraved versions of paintings by the masters in which many artists have faithfully and sometimes with drama and beauty portrayed the activities of medical practitioners and the suffering of the sick or injured.

This engraving by an unidentified artist presents a favorable view of mesmerism, or animal magnetism, which gained popularity in late 18th century Europe, especially in France, where the fascination with science spread to all levels of society. Mesmerism was the topic for many prints, mostly satiric, of the late 18th century, as were most aspects of popular science.

Friedrich Anton Mesmer of Vienna - a charlatan or perhaps a man with true faith in his cause celébrè - propounded his theories of a universal fluid to many willing audiences in Paris. This fluid was the purported source of all harmony, physical and moral accord with all nature in a "rousseauean" sense. Mesmer defined disease as discord among general harmony; therefore, in order to cure disease the body had to be brought back into harmony with the universal harmony.

The tub in the central part of the picture is a mechanism for directing the universal fluid and thus for bringing about harmony. A sick person attached himself to the tub with ropes and directed an iron rod toward the afflicted part of the body. The universal fluid was also directed by the fingers of the mesmerist, as the man on the left (who may be Mesmer) is doing. It was also directed by an iron rod held by a mesmerist, as the man on the right is doing. (Mesmer imparted his secret to certain others in the mesmerist societies so that they could heal the sick also.) As a person was mesmerized he often entered into a cataleptic state called a crisis or went into convulsions as a climax of the cure. The woman on the left has entered the crisis stage.

Men and women of all ages and from all strata of society are represented in the harmonious scene. Note the cleric on the right. The second tub in the back room is a tub for the poor. The children are there for education and exposure to the universal fluid of harmony, not for treatment of disease. This early education and exposure was deemed valuable for producing "natural" harmonious adults. The musicians in the background played cheerful, harmonious music in order to further the general state of harmony and thus promote cures.

The Organization of the National Medical Audiovisual Center

(third in a series on components of the National Library of Medicine)

The July 1968 reorganization of the National Medical Audiovisual Center in Atlanta, a component of the National Library of Medicine, centered operational control in three branches: Production; Acquisition, Distribution, and Reference; and Education Systems and Development.

The Production Branch, with Jack C. Kirkland as chief, and Carl Flint, assistant chief, produces audiovisuals of all types from photomicrographs to video tapes. Its production facilities are available not only to NLM and NIH, parent organizations, but to all other Public Health Service Agencies and Federal institutions concerned with medicine and health. Along with its direct production activities, this branch is also increasingly involved with teaching methods using audio-visuals and the supply of support materials for schools or institutions of the medical professions developing their own audio-visual programs.

Robert E. Sumpter, chief of the Acquisition, Distribution, and Reference Branch, a relatively new branch, operates a resource center for medical audio-visual materials. His branch is a clearinghouse for international information pertaining to medical audio-visuals and maintains and develops five basic collections of audio-visual material. These include the Distribution Collection, the Still Picture Collection, the National Archives of Medical Motion Pictures, the Motion Picture Stock Footage Collection and the International Index of Medical Film Data. The most active is the Distribution Collection, almost 25 years old. NMAC presently has over 900 different titles in this collection available on a short-term, free loan basis to professional medical health requestors. In Fiscal Year 1968, a total of 92,731 audio-visuals were loaned to the professions from this collection alone. This branch also acquires inventories and ships the many films it distributes.

The Still Picture Collection contains over 100,000 items, including still photographs, slides and art work.

The National Archives of Medical Motion Pictures is a collection of completed audio-visual productions no longer generally available.

The Motion Picture Stock Footage Collection presently has approximately 1,000,000 feet of unedited motion picture sequences which include medical-health information.

The collection with the greatest potential of the five is the International Index of Medical Film Data, housed within the Reference Section of the branch. This is a complete reference file of descriptive and source information in every audio-visual known relating to medical or health information.

In the Education Systems and Development Branch, Dr. Norman L. Cole is the Acting Chief, while also serving as Chief of Educational Studies and Development Section. Clement Benjamin is Acting Director of the Audio-Visual Systems Planning Section. This branch is one of the newest areas of NMAC activity. Its purpose is to show medical educators how the use of good audio-visual equipment improves availability, effectiveness and efficiency of learning. Essentially, Audio-Visual Systems Planning is concerned with physical facilities and hardware necessary for audio-visual

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NMAC (Continued from Page 7)

instruction, while Educational Studies and Development concentrates on ways to organize personnel and ideas into effective audio-visual teaching programs.

The Production Branch and the Educational Systems and Development Branch are located at 1600 Clifton Road, N.E., Atlanta, while the Acquisitions, Distribution and reference Branch is located in a new building, the NMAC Annex, 2111 Plater Bridge Road, N.E., Atlanta.

Dr. James Lieberman, Director of the Center is also Associate Director for Audio-visual Telecommunications, NLM. Other staff heads are: Edward F. McClellan, Deputy Director; Jerome K. Barnett, Assistant Director for Operations; Dr. Henry D. Abraham, Associate in Biomedical Communication, and Dondell C. Cotter, Administrative Officer.

Special Staff Services include the Office of Information and Publications, headed by Miss Katherine Skogstad, Reference Room and the Office of Special Projects, the latter headed by Joseph A. Staton, Public Health Service Officer.

Cumulated Index Medicus

Orders are now being accepted by the Superintendent of Documents for the 1968 edition of Cumulated Index Medicus (Vol. 9), which is scheduled for delivery in April. This Year's CIM, with 8,925 pages in five volumes, will include the following sections: Medical Subject Headings, List of Journals Indexed, Bibliography of Medical Reviews, and Index Medicus subject and author sections. The price for the 1968 cumulation is $72.25, plus $8.30 for foreign mailing. Orders should be sent to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, and should include remittance.

Amendment

The following changes have been made in region coverage and Search Centers designate which were reported in "Search Boundaries Realigned," (*News*, January 1969).

Region	Name of Region	States	Search Center(s) Designate
4	Mid-Atlantic	add: North Carolina	Mid-Atlantic Regional Medical Library P.O. Box 30260 Bethesda, Maryland 20014
6	Southeastern	delete: North Carolina	
9	South Central	add: Arkansas Louisiana New Mexico Oklahoma	MEDLARS Management Section National Library of Medicine 8600 Rockville Pike Bethesda, Maryland 20014
		Texas	MEDLARS Center Texas Medical Center Jesse H. Jones Library Building Houston, Texas 77025